

Title (en)

Downhole tool with hydraulic timer.

Title (de)

Werkzeug mit einer hydraulischen Schaltung zur Verwendung im Bohrloch.

Title (fr)

Outil de fond de puits avec minuterie hydraulique.

Publication

**EP 0482926 A2 19920429 (EN)**

Application

**EP 91309836 A 19911024**

Priority

US 60282390 A 19901024

Abstract (en)

A downhole tool apparatus such as a sampler (120) includes an operating mechanism (166) and a hydraulic timer (206). The hydraulic timer (206) is operably associated with the operating mechanism for providing a time delay prior to operation of the operating mechanism. The hydraulic timer includes a fluid flow restriction (214) and a spring biased piston (208) which pushes a predetermined volume of hydraulic fluid through the fluid flow restriction (214). An initiator valve (230) is located hydraulically in series with the fluid flow restriction (214). The time delay is provided by the time taken for the fluid to pass through the restriction. Thereafter the operating mechanism is effective. <IMAGE>

IPC 1-7

**E21B 41/00**; **E21B 49/08**

IPC 8 full level

**E21B 34/10** (2006.01); **E21B 41/00** (2006.01); **E21B 49/08** (2006.01)

CPC (source: EP US)

**E21B 34/108** (2013.01 - EP US); **E21B 41/00** (2013.01 - EP US); **E21B 49/082** (2013.01 - EP US)

Cited by

EA012318B1; GB2363147B; GB2289488A; US5664629A; GB2289488B; US7779911B2; WO2006107215A1

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